

Product datasheet

Recombinant Human Hsp27 protein ab245922

1 Image

Description

Product name	Recombinant Human Hsp27 protein	
Purity	> 90 % SDS-PAGE. Affinity Purified	
Expression system	Escherichia coli	
Accession	<u>P04792</u>	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	MTERRVPFSLLRGPSWDPFRDWYPHSRLFDQAFGLPRL PEEWSQWLGSS WPGYVRPLPPAAIESPAVAAPAYSRALSRQLSSGVSEIRH TADRWRVSLD VNHFAPDELTVKTKDGVVEITGKHEERQDEHGYISRCFTR KYTLPPGVDP TQVSSSLSPGTLTVEAPMPKLATQSNEITIPVTFESRAQL GGPEAAKSD ETAAK	
Predicted molecular weight	27 kDa	
Amino acids	1 to 205	

Specifications

Our **Abpromise guarantee** covers the use of **ab245922** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. Constituents: 0.32% Tris HCl, 2.61% Sodium chloride, 10% Glycerol (glycerin, glycerine), 0.08%
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General Info

Function

Involved in stress resistance and actin organization.

Tissue specificity

Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and in tissues composed of striated and smooth muscle.

Involvement in disease

Defects in HSPB1 are the cause of Charcot-Marie-Tooth disease type 2F (CMT2F) [MIM:606595]. CMT2F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy. Nerve conduction velocities are normal or slightly reduced. CMT2F onset is between 15 and 25 years with muscle weakness and atrophy usually beginning in feet and legs (peroneal distribution). Upper limb involvement occurs later. CMT2F inheritance is autosomal dominant.

Defects in HSPB1 are a cause of distal hereditary motor neuronopathy type 2B (HMN2B) [MIM:608634]. Distal hereditary motor neuropathies constitute a heterogeneous group of neuromuscular disorders caused by selective impairment of motor neurons in the anterior horn of the spinal cord, without sensory deficit in the posterior horn. The overall clinical picture consists of a classical distal muscular atrophy syndrome in the legs without clinical sensory loss. The disease starts with weakness and wasting of distal muscles of the anterior tibial and peroneal compartments of the legs. Later on, weakness and atrophy may expand to the proximal muscles of the lower limbs and/or to the distal upper limbs.

Sequence similarities

Belongs to the small heat shock protein (HSP20) family.

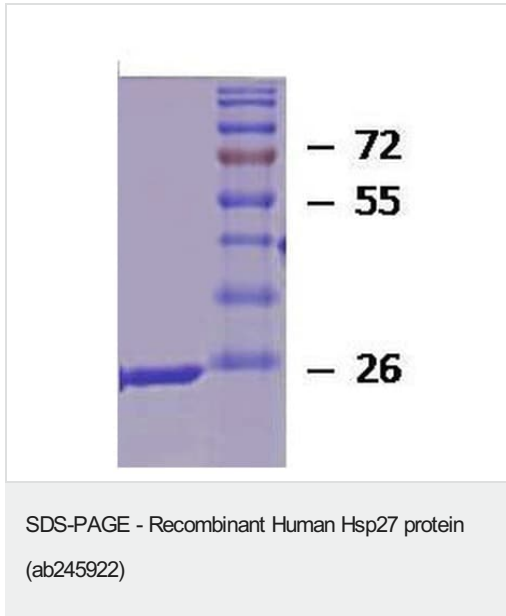
Post-translational modifications

Phosphorylated in MCF-7 cells on exposure to protein kinase C activators and heat shock.

Cellular localization

Cytoplasm. Nucleus. Cytoplasm > cytoskeleton > spindle. Cytoplasmic in interphase cells. Colocalizes with mitotic spindles in mitotic cells. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.

Images



SDS-PAGE analysis of Recombinant Human Hsp27 protein
(ab245922)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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